# OPINIONS AND DECLARATIONS RENDERED BY THE INTER-NATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Edited by

FRANCIS HEMMING, C.M.G., C.B.E.

as Secretary to the Commission

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### **OPINION 519**

Addition to the *Official List of Generic Names in Zoology* of the names of twenty-three genera of Macrura Reptantia (Class Crustacea) and use of the Plenary Powers in regard to three matters connected therewith

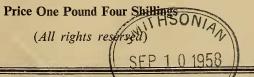
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(16th December 1954)

## **OPINION 519**

### ADDITION TO THE "OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY "OF THE NAMES OF TWENTY-THREE GENERA OF MACRURA REPTANTIA (CLASS CRUSTACEA) AND USE OF THE PLENARY POWERS IN REGARD TO THREE MATTERS CONNECTED THEREWITH

**RULING :**—(1) The following action is hereby taken under the Plenary Powers :—

- (a) It is hereby directed that of the generic names *Cherax* and *Cheraps* published by Erichson in 1846, the spelling *Cherax* is to be accepted as the Valid Original Spelling;
- (b) The emendation to *Palinurus* of the generic name *Pallinurus* Weber, 1795, is hereby validated ;

(2) The under-mentioned names of genera in the Order Decapoda (Class Crustacea) are hereby placed on the *Official List of Generic Names in Zoology* with the Name Numbers severally specified below :—

(i) Astacoides Guérin-Méneville, 1839 (gender : masculine) (type species, by monotypy : Astacoides goudotii Guérin-Méneville, 1839) (Name No. 1275);

- (ii) Cambarellus Ortmann, 1905 (gender : masculine) (type species, by original designation : Cambarus montezumae de Saussure, 1857) (Name No. 1276);
- (iii) Cambarus Erichson, 1846 (gender : masculine) type species, by selection by Faxon (1898) : Astacus bartonii Fabricius, 1798) (Name No. 1277);
- (iv) Cherax Erichson, 1846, the spelling for this name validated under the Plenary Powers under (1)(a) above (gender : masculine) (type species, by monotypy : Astacus (Cheraps) preissii Erichson, 1846) (Name No. 1278);
- (v) Engaeus Erichson, 1846 (gender : masculine) (type species, by selection by Clark (1936) : Astacus (Engaeus) fossor Erichson, 1846) (Name No. 1279);
- (vi) Enoplometopus Milne Edwards (A.), 1862 (gender : masculine) (type species, by monotypy : Enoplometopus pictus Milne Edwards (A.), 1862) (Name No. 1280);
- (vii) *Ibacus* Leach, 1815 (gender : masculine) (type species, by monotypy : *Ibacus peronii* Leach, 1815) (Name No. 1281);
- (viii) Linuparus White, 1847 (gender : masculine) (type species, by monotypy : Palinurus trigonus von Siebold, 1824) (Name No. 1282);
  - (ix) Orconectes Cope, 1872 (gender : masculine) (type species, by selection by Fowler (1912) : Orconectes inermis Cope, 1872) (Name No. 1283) ;
    - (x) Palinurellus von Martens, 1878 (gender : masculine) (type species, by monotypy : Palinurellus gundlachi von Martens, 1878) (Name No. 1284) ;

- (xi) Palinurus (emend. under the Plenary Powers in (1)(b) above of Pallinurus) Weber, 1795 (gender : masculine) (type species, by monotypy : Astacus elephas Fabricius, 1787) (Name No. 1285);
- (xii) Palinustus Milne Edwards (A.), 1880 (gender : masculine) (type species, by monotypy : Palinustus truncatus Milne Edwards (A.), 1880) (Name No. 1286) ;
- (xiii) Paracambarus Ortmann, 1906 (gender : masculine) (type species, by monotypy : Cambarus (Paracambarus) paradoxus Ortmann, 1906) (Name No. 1287);
- (xiv) Paranephrops White, 1842 (gender : masculine) (type species, by monotypy : Paranephrops planifrons White, 1842) (Name No. 1288);
- (xv) Parastacus Huxley, [1879] (gender : masculine) (type species, by selection by Faxon (1898) : Astacus pilimanus von Martens, 1869) (Name No. 1289);
- (xvi) Parribacus Dana, 1852 (gender : masculine) (type species, by selection by Holthuis (1956) : Scyllarus antarcticus Lund, 1793, as defined by the lectotype selected by Holthuis (1956)) (Name No. 1290);
- (xvii) Polycheles Heller, 1862 (gender : masculine) (type species, by monotypy : Polycheles typhlops Heller, 1862) (Name No. 1291);
- (xviii) Procambarus Ortmann, 1905 (gender : masculine) (type species, by selection by Fowler (1912) : Cambarus digueti Bouvier, 1897) (Name No. 1292);
  - (xix) Puerulus Ortmann, 1897 (gender : masculine) (type

species, by selection by Calman (1909) : Panulirus angulatus Bate, 1888) (Name No. 1293);

- (xx) Scyllarus Fabricius (J.C.), 1775 (gender : masculine) (type species, by monotypy : Cancer arctus Linnaeus, 1758, as defined by the lectotype selected by Holthuis (1956)) (Name No. 1294);
  - (xxi) *Thaumastocheles* Wood-Mason, 1874 (gender : masculine) (type species, by monotypy : *Astacus zaleucus* Thomson, 1873) (Name No. 1295);
- (xxii) *Thenus* Leach, 1815 (gender : masculine) (type species, by monotypy : *Thenus indicus* Leach, 1815) (Name No. 1296);
- (xxiii) Willemoesia Grote, 1873 (gender : feminine) (type species, by monotypy : Deidamia leptodactyla von Willemoes-Suhm, 1873) (Name No. 1297).

(3) The under-mentioned specific names, being the specific names of species which are the type species of genera belonging to the Order Decapoda (Class Crustacea) placed on the *Official List of Generic Names in Zoology* under (2) above, are hereby placed on the *Official List of Specific Names in Zoology* with the Name Numbers severally specified below :—

- (i) angulatus Bate, 1888, as published in the combination Panulirus angulatus (specific name of type species of Puerulus Ortmann, 1897) (Name No. 1526);
- (ii) antarcticus Lund, 1793, as published in the combination Scyllarus antarcticus, and as defined by the lectotype selected by Holthuis (1956) (specific name of type species of Parribacus Dana, 1852) (Name No. 1527);

- (iii) arctus Linnaeus, 1758, as published in the combination Cancer arctus and as defined by the lectotype selected by Holthuis (1956) (specific name of type species of Scyllarus Fabricius, 1775) (Name No. 1528);
- (iv) bartonii Fabricius, (J.C.), 1798, as published in the combination *Astacus bartonii* (specific name of type species of *Cambarus* Erichson, 1846) (Name No. 1529);
  - (v) digueti Bouvier, 1897, as published in the combination Cambarus digueti (specific name of type species of Procambarus Ortmann, 1905) (Name No. 1530);
- (vi) elephas Fabricius (J.C.), 1787, as published in the combination Astacus elephas (specific name of type species of Palinurus Weber, 1795) (Name No. 1531);
- (vii) fossor Erichson, 1846, as published in the combination Astacus (Engaeus) fossor (specific name of type species of Engaeus Erichson, 1846) (Name No. 1532);
- (viii) gundlachi von Martens, 1878, as published in the combination Palinurellus gundlachi (specific name of type species of Palinurellus von Martens, 1878) (Name No. 1533);
  - (ix) *leptodactyla* von Willemoes-Suhm, 1873, as published in the combination *Deidamia leptodactyla* (specific name of type species of *Willemoesia* Grote, 1873) (Name No. 1534);
    - (x) montezumae de Saussure, 1857, as published in the combination Cambarus montezumae (specific name of type species of Cambarellus Ortmann, 1905) (Name No. 1535);

- (xi) paradoxus Ortmann, 1906, as published in the combination Cambarus (Paracambarus) paradoxus (specific name of type species of Paracambarus Ortmann, 1906) (Name No. 1536);
- (xii) peronii Leach, 1815, as published in the combination Ibacus peronii (specific name of type species of Ibacus Leach, 1815) (Name No. 1537);
- (xiii) *pictus* Milne Edwards (A.), 1862, as published in the combination *Enoplometopus pictus* (specific name of type species of *Enoplometopus* Milne Edwards (A.), 1862) (Name No. 1538);
- (xiv) pilimanus von Martens, 1869, as published in the combination Astacus pilimanus (specific name of type species of Parastacus Huxley, [1879]) (Name No. 1539);
  - (xv) planifrons White, 1842, as published in the combination Paranephrops planifrons (specific name of type species of Paranephrops White, 1842) (Name No. 1540);
- (xvi) trigonus von Siebold, 1824, as published in the combination Palinurus trigonus (specific name of type species of Linuparus White, 1847) (Name No. 1541);
- (xvii) truncatus Milne Edwards (A.), 1880, as published in the combination Palinustus truncatus (specific name of type species of Palinustus Milne Edwards (A.), 1880) (Name No. 1542);
- (xviii) typhlops Heller, 1862, as published in the combination Polycheles typhlops (specific name of type species of Polycheles Heller, 1862) (Name No. 1543);

(xix) zaleucus Thomson, 1873, as published in the combination Astacus zaleucus (specific name of type species of Thaumastocheles Wood-Mason, 1874) (Name No. 1544).

(4) The under-mentioned specific names, each of which is the name of a nominal species currently identified by specialists with a nominal species having a later available name which is the type species of a genus belonging to the Order Decapoda (Class Crustacea) placed on the Official List of Generic Names in Zoology under (2) above, are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers severally specified below :—

- (i) madagascarensis Milne Edwards (H.) & Audouin, 1839, as published in the combination Astacus madagascarensis (Name No. 1545);
- (ii) bicarinatus Gray (J.E.), 1845, as published in the combination Astacus bicarinatus (Name No. 1546);
- (iii) *pellucidus* Tellkampf, 1844, as published in the combination *Astacus pellucidus* (Name No. 1547);
- (iv) orientalis Lund, 1793, as published in the combination Scyllarus orientalis (Name No. 1548).

(5) The under-mentioned generic names are hereby placed on the *Official Index of Rejected and Invalid Names in Zoology* with the Name Numbers severally specified below :—

(a) Arctus De Haan, [1849] (a junior objective synonym of Scyllarus Fabricius, 1775) (Name No. 1170);

- (b) Arctus Dana, 1852 (a junior homonym of, and a junior objective synonym of, Arctus De Haan, [1849], and a junior objective synonym of Scyllarus Fabricius, 1775) (Name No. 1171);
- (c) Avus Ortmann, 1891 (a junior objective synonym of Linuparus White, 1847) (Name No. 1172);
- (d) Bartonius Ortmann, 1905 (a junior objective synonym of Cambarus Erichson, 1846) (Name No. 1173) ;
- (e) Chaeraps Huxley, [1879] (an Erroneous Subsequent Spelling for Cherax Erichson, 1846) (Name No. 1174);
- (f) Cheraps Erichson, 1846 (an Invalid Original Spelling for Cherax Erichson, 1846, under the Ruling given under the Plenary Powers in (1)(a) above) (Name No. 1175);
- (g) *Deidamia* von Willemoes-Suhm, 1873 (a junior homonym of *Deidamia* Clemens, 1859) (Name No. 1176);
- (h) Palinurus Fabricius (J.C.), 1798 (a junior objective synonym of, and a junior homonym of, Palinurus Weber, 1795) (Name No. 1177);
- (i) Palinurus De Kay, 1842 (a junior homonym of Palinurus Weber, 1795) (Name No. 1178);
- (j) Pallinurus Weber, 1795 (an Invalid Original Spelling for Palinurus Weber, 1795) (Name No. 1179);
- (k) Polycheles Brady & Robertson, 1870 (a junior homonym of Polycheles Heller, 1862) (Name No. 1180);
- (1) Puer Ortmann, 1891 (a junior homonym of Puer Lefebvre, 1842) (Name No. 1181).

(6) The under-mentioned specific names are hereby placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* with the Name Numbers severally specified below :---

- (a) goudotii Guérin-Méneville, 1839, as published in the combination Astacoides goudotii (a name suppressed under the Plenary Powers under (1)(c) above) (Name No. 528);
- (b) incisus (Péron MS.) Leach, 1815, as published in the combination Scyllarus incisus (a junior objective synonym of peronii Leach, 1815, as published in the combination Ibacus peronii) (Name No. 529);
- (c) madagascariensis Audouin & Milne Edwards (H.), 1841, as published in the combination Astacus madagascariensis (an Erroneous Subsequent Spelling for madagascarensis Milne Edwards (H.) & Audouin, 1839, as published in the combination Astacus madagascarensis) (Name No. 530);
- (d) quadricornis Weber, 1795, as published in the combination Pallinurus quadricornis (a junior objective synonym of elephas Fabricius, 1787, as published in the combination Astacus elephas) (Name No. 531);
- (e) quadricornis Fabricius (J.C.), 1798, as published in the combination Palinurus quadricornis (a junior objective synonym of elephas Fabricius (J.C.), 1787, as published in the combination Astacus elephas, and a junior homonym of, and a junior objective synonym of, quadricornis Weber, 1795, as published in the combination Pallinurus quadricornis) (Name No. 532);
- (f) ursus Dana, 1852, as published in the combination Arctus ursus (a junior objective synonym of arctus

Linnaeus, 1758, as published in the combination *Cancer arctus*) (Name No. 533);

- (g) ursusmajor Herbst, 1793, as published in the combination Cancer (Astacus) ursus-major and as defined by the lectotype selected by Holthuis (1956) (a junior objective synonym of antarcticus Lund, 1793, as published in the combination Scyllarus antarcticus) (Name No. 534);
- (h) ursusminor Herbst, 1793, as published in the combination Cancer (Astacus) ursus-minor and as defined by the lectotype selected by Holthuis (1956) (a junior objective synonym of arctus Linnaeus, 1758, as published in the combination Cancer arctus) (Name No. 535);
- (i) vulgaris Latreille, [1802—1803], as published in the combination Palinurus vulgaris (a junior objective synonym of homarus Linnaeus, 1758, as published in the combination Cancer homarus) (Name No. 536);
- (j) vulgaris Latreille, 1804, as published in the combination Palinurus vulgaris (a junior objective synonym of elephas Fabricius (J.C.), 1787, as published in the combination Astacus elephas, and a junior homonym of vulgaris Latreille, [1802—1803], as published in the combination Palinurus vulgaris) (Name No. 537).

(7) The under-mentioned family-group names are hereby placed on the *Official List of Family-Group Names in Zoology* with the Name Numbers severally specified below :—

(a) CAMBARINAE Hobbs, 1942 (type genus : Cambarus Erichson, 1846) (Name No. 237) ;

- (b) PALINURIDAE (correction by Samouelle (1819) of PALINURINI) Latreille, [1802—1803] (type genus : Palinurus Weber, 1795) (Name No. 238);
- (c) PARASTACIDAE Huxley, [1879] (type genus: Parastacus Huxley, [1879]) (Name No. 239) ;
- (d) POLYCHELIDAE Wood-Mason, 1874 (type genus: Polycheles Heller, 1862) (Name No. 240);
- (e) SCYLLARIDAE (correction by White (1847) of SCYLLARIDES) Latreille, 1825 (type genus: *Scyllarus* Fabricius, 1775) (Name No. 241).

(8) The under-mentioned family-group names are hereby placed on the *Official Index of Rejected and Invalid Family-Group Names in Zoology* with the Name Numbers severally specified below :—

- (a) PALINURINI Latreille, [1802—1803] (type genus : *Palinurus* Weber, 1795) (an Invalid Original Spelling for PALINURIDAE but available for a family-group taxon belonging to a category not having a prescribed termination) (Name No. 274);
- (b) SCYLLARIDES Latreille, 1825 (type genus : Scyllarus Fabricius, 1775) (an Invalid Original Spelling for SCYLLARIDAE) (Name No. 275).

#### I. THE STATEMENT OF THE CASE

On 4th November 1955 Dr. L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie*, *Leiden*, *The Netherlands*) submitted the following application for the addition to the Official List of Generic Names in Zoology of the names of twenty-five genera of Macrura Reptantia (Class Crustacea) and in connection therewith for the use by the Commission of its Plenary Powers (a) to direct

that of the two spellings *Cherax* and *Cheraps* published by Erichson in 1846, the former be accepted as the Valid Original Spelling, (b) to validate the emendation to *Palinurus* of *Pallinurus* Weber, 1795, and (c) to suppress the specific name *goudotii* Guérin-Méneville, 1839, as published in the combination *Astacoides goudotii*, for the purposes of the Law of Priority but not for those of the Law of Homonymy :—

Proposed addition to the "Official List of Generic Names in Zoology" of the names of twenty-five Genera of Macrura Reptantia (Class Crustacea, Order Decapoda), including proposals for the use of the Plenary Powers (a) to validate the spelling "Cherax" as the valid Original Spelling for the Generic Name Published as "Cherax" and "Cheraps" by Erichson in 1846, (b) to suppress the Specific Name "goudotii" Guérin-Méneville 1839, as published in the combination "Astacoides goudotii", and (c) to validate the Emendation to "Palinurus" of the generic Name "Pallinurus", Weber, 1795

#### By L. B. HOLTHUIS

#### (Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands)

I submit herewith to the International Commission on Zoological Nomenclature a list of the names of twenty-five genera of Macrura Reptantia for addition to the *Official List of Generic Names in Zoology*. Each of these names is an available name in the sense that it is not a homonym of any generic name previously published for a genus in the Animal Kingdom. All these names are currently used in carcinological literature and have been used for the last twenty-five years at the least. The validity of only one of these names has ever been questioned. This one case is dealt with in paragraph 4 below. Except for the two cases dealt with in paragraphs 3 and 5 below, the spelling of the names adopted here is the Valid Original Spelling. The species indicated here as the type species of the genera enumerated in paragraph 9, have been duly determined as such under Article 30 of the *Règles Internationales de la Nomenclature Zoologique*. For each generic name the gender is indicated. The following seven cases need some special comment :--

2. Astacoides Guérin-Méneville, 1839. The type species of this genus was described almost simultaneously (a) by Guérin-Méneville and (b) by H. Milne Edwards and Audouin. In both cases the type specimens were collected by a M. Goudot in Madagascar, and they

possibly originally belonged to the same lot. Guérin-Méneville, who named the species Astacoides goudotii, published its description on page 109 of the April number of the Revue zoologique for the year 1839, a periodical which was published monthly. H. Milne Edwards & Audouin published a short description of the same species in L'Institut ((sect. 1) 7 (280): 152), under the name Astacus madagascarensis. This number of L'Institut, which is a weekly periodical, bears the date "9 mai 1839", which confidently may be accepted as the date of publication. The April number of *Revue* zoologique contains (on page 119) a report of the session of April 29 of the "Académie royale des sciences de Paris", and consequently must have been published after that date. Since this same April number was offered by Guérin-Méneville to the Académie des Sciences in their session of 13th May 1839 (cf. C. R. Acad. Sci., Paris 8:766)\* the date of publication of that number lies between April 29 and May 13, 1839; the fact that this number was not offered to the Academy in their session of May 6 is an indication that the day of issue lies somewhere between the 6th and 13th May 1839. Even this narrowing down of the date of publication to one week does not solve the present question, since Astacus madagascarensis was published in the same week (9th May 1839). With the available evidence the date of publication of the name Astacoides goudotii Guérin-Méneville must be accepted as 13th May 1839, since this is the earliest date on which it is certain that the publication of that name had occurred. The specific name goudotii therefore is a junior subjective synonym of the name madagascarensis and must give way to the latter name. This agrees quite well with the practice adopted by carcinologists, since after 1839. practically all authors have used the specific name madagascarensis or (sometimes) its invalid emendation madagascariensis (first published as Astacus madagascariensis Audouin & Milne Edwards (H.), 1841, Arch. Mus. Hist. nat. Paris 2:35) and rejected the name goudotii. However, as additional evidence eventually may be forthcoming, giving a more exact date of publication of Astacoides goudotii, and as the possibility exists that this date actually falls before the date of publication of the name Astacus madagascarensis, it seems best to set all doubts as to the priority of the latter name at rest by suppressing the former under the Plenary Powers of the Commission.

3. Cherax Erichson, 1846. In the publication containing the original description of this genus, Erichson (1846, Arch. Naturgesch.

<sup>\*</sup> It is stated in these Comptes Rendus that the Academy received during their session of 13th May "Revue zoologique ; par le même [=Guérin-Méneville]; 1839, in-8°". Though the actual number of the Revue zoologique received at this session is not specially indicated here, it is evident that the April number (number 4) is meant, since Guérin offered No. 1 (the January number) of his Revue to the Academy in their session of 4th February 1839 (cf. C. R. Acad. Sci., Paris 8 : 180), No. 2 (the February number) in the session of 11th March (cf. C. R. Acad. Sci., Paris 8 : 366), No. 3 (the March number) in the session of 1st April 1839 (cf. C.R. Acad. Sci., Paris 8 : 502).

12(1): 86–103) used two different spellings for its name. On pages 88 and 89 the spelling *Cherax* is employed four times, while on page 101 the spelling Cheraps is used twice. According to the Rule formulated at the Copenhagen Congress, "where there was more than one Original Spelling and in the case of none of these spellings was there clear evidence that it was the result of an inadvertent error, the Valid Original Spelling is that one of the Original Spellings used by the First Subsequent User of the name" (Hemming, 1953, Copenhagen Decisions zool. Nomencl. : 43, 44). In the present case the First Subsequent User was Erichson himself, who in an addendum to his above cited paper (1846, Arch. Naturgesch. 12(1): 375-377) on pages 376 and 377 used the spelling Cheraps twice. Cheraps therefore is the nomenclatorially correct name for the genus discussed here. Up to 1936 this spelling was used by ten of the sixteen authors dealing with this genus, while three authors used the Invalid Subsequent Spelling Chaeraps (first published by Huxley, [1879], Proc. zool. Soc. Lond. 1878: 752, 755, 764, 767-771, 775, 776, 786). I know of no-one in the period up to 1936 who used the spelling Cherax, apart from Erichson himself. In 1936, however, Clark (1936, Mem. nat. Mus. Victoria 10:19) adopted the spelling Cherax because this was the spelling first used by Erichson in his original paper. Since Clark's publication is a monographic treatment of the Australian freshwater crayfishes and contains a revision of the genus Cherax, it has been consulted by practically all subsequent workers in this group and her nomenclature has been generally adopted. Of the nine authors publishing on this genus since 1936, six used the spelling Cherax, two that of Cheraps. In 1949 Holthuis (Nova Guinea (n.s.) 5: 299) in a revision of the New Guinea species of the genus in question also came to the conclusion that the spelling Cherax was to be preferred to that of Cheraps, though his reasons were different from those given by Clark. Holthuis, basing himself on the Principle of the First Reviser, pointed out that the first publication in which both the spellings Cherax and Cheraps were mentioned and in which one of these was selected as the correct spelling, is Schulze, Kükenthal, Heider & Hesse's (1927) Nomencl. Anim. Gen. Subgen. (2: 649), where behind the word Cheraps the indication "pro Cherax" is given. Since during the Copenhagen Congress the Principle of the First Subsequent User, and not that of the First Reviser was adopted, the spelling Cherax employed by Clark and Holthuis proves to be incorrect, that of Cheraps being correct. However, as in modern carcinological literature the spelling Cherax has become generally accepted, it would seem senseless to switch back to Cheraps, thereby causing a new confusion. Therefore the International Commission on Zoological Nomenclature is asked here to use its Plenary Powers to validate the spelling Cherax as the Valid Original Spelling and to suppress the spelling Cheraps.

4. *Linuparus* White, 1847 (spelling): This generic name is an anagram of the name *Palinurus* and evidently for that reason was rejected by Ortmann (1891, *Zool. Jb. Syst.* 6:21) who proposed the new name

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Avus for it. In a later publication Ortmann (1897, Amer. J. Sci. (4) 4:290) admitted his error and accepted White's name. Very few authors have followed Ortmann (1891) in the use of the name Avus, which now is completely forgotten.

5. Palinurus Weber, 1795 (spelling): Before Rathbun's (1904, Proc. biol. Soc. Wash. 17: 169–172) rediscovery of Weber's (1795) Nomenclator Entomologicus, the present genus was always referred to as Palinurus Fabricius, 1798, and its name spelled with one "1". The genera Pallinurus Weber, 1795, and Palinurus Fabricius, 1798, are objective synonyms as both have the same type species. The generic name Pallinurus Weber, being the older of the two, has priority and under the Règles ought to be used. As, however, the spelling Palinurus has been consistently employed by practically every carcinologist from 1798 to the present day (even Miss Rathbun's discovery of Weber's Nomenclator did not cause any noticeable difference here) it would be very awkward to change the spelling to Pallinurus. This is the more true since the name Pallinurus is the name of a mythological figure, viz., the steersman of Aeneas's ship. The Commission is therefore asked to use its Plenary Powers to approve the emendation of the spelling of the generic name Pallinurus Weber, 1795, to Palinurus.

6. Palinurus Weber, 1795 (name for type species) : The synonymy of the type species of this genus, Astacus elephas Fabricius, 1787 (Mant. Ins. 1: 331), is rather complicated. Fabricius's original description of this species and his reference to the, then still unpublished, figure by Herbst leave not the least doubt as to its identity. Its place of occurrence was, however, incorrectly given as "Habitat in Americae meridionalis Insulis", for the species concerned, the European Spiny Lobster, is known only from the eastern Atlantic, the British Isles to the Mediterranean and N.W. Africa. For no apparent reason both Weber (1795, Nomencl. Ent. : 94) and Fabricius himself (1798, Suppl. Ent. syst. : 401) substituted the specific name quadricornis for that of elephas, while in 1804 Latreille (Ann. Mus. Hist. nat., Paris, 3: 391) replaced the name quadricornis by that of vulgaris. The name Palinurus vulgaris Latreille, 1804, has been adopted by most subsequent authors who dealt with the European Spiny Lobster. Apart from the fact that this name is a junior objective synonym of the names Astacus elephas Fabricius, 1787, Pallinurus quadricornis Weber, 1795, and Palinurus quadricornis Fabricius, 1798, it is furthermore a junior homonym of Palinurus vulgaris Latreille, [1802-1803] (Hist. nat. gén. part. Crust. Ins. 6: 191), which itself is a substitute name for, and thereby a junior objective synonym of, Cancer homarus Linnaeus, 1758 (Syst. Nat. (ed. 10) 1: 633). The latter species is an Indo-West Pacific spiny lobster which in modern literature is indicated with the name Panulirus homarus (Linnaeus). Though the name Palinurus vulgaris has been much used, it seems best in this case to follow the normal provisions of the Règles

here and to place the correct name *elephas* Fabricius on the *Official* List of Specific Names in Zoology, the more so since this name has been adopted by several modern authors.

7. Parribacus Dana, 1852: The original description of the type species of this genus, *Scyllarus antarcticus*, was published in 1793 by Lund (*Skr. Naturh. Selsk. Kbh.* 2(2) : 22). In the same year this same species was described by Herbst, 1793 (Versuch Naturgesch. Krabben Krebse 2(3): 82) under the name Cancer (Astacus) ursus major. The available evidence is not sufficient to permit of a decision on the question as to which of these two names was published first. The Principle of the First Reviser has to be adopted in order to find out which of the two names should be used, for under the Règles the above names rank for priority as from the same day, i.e. 31st December 1793, the earliest date as from which each of these names is known to have been published. As pointed out by Holthuis, 1946 (Temminckia 7: 104) the First Subsequent Reviser here is Milne Edwards (H.), 1837 (Hist. nat. Crust. 2: 287, 288) who selected the name antarcticus for the present species. This specific name, which is far more widely used than that of *ursusmajor*, is now submitted for insertion in the Official List. In the synonymy of Scyllarus antarcticus, Lund (1793) cited four authors : "Seba Mus. 3. Tab. 20. fig. 1. Rumph. Mus. Tab. 2. fig. C. Marcgraf H. Brasiliae p. 186. Johnston. exsangv. Tab. 9. fig. 14." The first two of these references (namely those to Seba and Rumphius) are cited also by Herbst (1793) in the synonymy of Cancer (Astacus) ursusmajor. As the lectotype for both Scyllarus antarcticus Lund, 1793, and Cancer (Astacus) ursusmajor Herbst, 1793, I now select the specimen figured on plate 2 fig. C of Rumphius's (1705) Amboinsche Rariteitkamer. By this action Scyllarus antarcticus Lund, 1793, and Cancer (Astacus) ursusmajor Herbst, 1793, become objective synonyms. It is now proposed that the specific name ursusmajor Herbst, as the junior of these two names, should be placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

8. Scyllarus Fabricius, 1775 : The type species of this genus is (by monotypy) Cancer arctus Linnaeus, 1758 (Syst. Nat. (ed. 10) 1:633). The original description of that species runs as follows :

C.[ancer] macrourus, thorace subaculeato hirto, manibus adactylis.

Marcgr. bras. 186. Poliquiquyixe.

Jonst. exsangu. t. 4. f. 3, 4, 8, 12.

Barrel. rar. t. 1288. f. 2.

Rumph. mus. t. 2. f. C. D.

Brown. jam. t. 41. f. 1.

Habitat in M. Europae, Asiae, Africae, Americae.

Linnaeus's definition of this species is so vague that it would fit any Scyllarid and indeed many other Crustacea. The literature referred to by Linnaeus deals with five different species of SCYLLARIDAE: Marcgraf's animal, like that figured by Rumphius in his fig. C, belongs to the species known at present as Parribacus antarcticus (Lund), Jonston's figs. 4 and 12 represent Scyllarides latus (Latreille), his figs. 3 and 8 show the species that at present is generally known as Scyllarus arctus (L.). The latter species is also figured by Barrelier. Rumphius's fig. D is made from a specimen of Thenus orientalis (Lund), while Browne figured a specimen of Scyllarides aequinoctialis (Lund). Cancer arctus Linnaeus, 1758, is therefore a composite species. To fix the identity of that species in harmony with current usage, I here select as the lectotype of *Cancer arctus* Linnaeus, 1758, the specimen figured in fig. 8 of pl. IV of J. Jonstonus's (1650) *Historiae Naturalis de* Exanguibus aquaticis Libri IV, which figure also may be found in the later (1657 and 1767) editions of Jonston's work and in its 1660 Dutch translation. In all these editions it is shown as pl. IV fig. 8. Comparing Jonston's figure with those given in older publications it becomes evident that this figure is not original, but is a copy of a figure published by Gesner (1558, Hist. Anim. 4: 1087), which itself again is copied from Rondelet's (1554, Libri Pisc. mar. : 546) excellent figure of the species. Herbst (1793, Versuch Naturgesch, Krabben Krebse 2(3):83) described the present species under the name Cancer (Astacus) ursus-minor and cited with the synonymy: "Sulzer Gesch. der Ins. tab. 32. Fig. 3. Gesner nomenclat. aquatil. p. 217. Ursaminor. Rondelet. Squilla caelata." Gesner's figure is a copy of that by Rondelet, which as pointed out above is the original figure of the type specimen of Cancer arctus Linnaeus. I now select Rondelet's specimen as the type specimen of Cancer (Astacus) ursusminor Herbst, 1793, making thereby Herbst's species a junior objective synonym of Cancer arctus Linnaeus, 1758.

9. The following list contains the required particulars regarding the twenty-five generic names, which it is now recommended should be placed on the *Official List of Generic Names in Zoology* :---

- Astacoides (masculine) Guérin-Méneville, 1839, Rev. zool. 2: 109 (type species, by monotypy: Astacoides goudotii Guérin-Méneville, 6—13 May 1839, Rev. zool. 2: 109 [Note (not for inclusion in the Official List): This name is a junior subjective synonym of Astacus madagascarensis Milne Edwards (H.) & Audouin, 9 May 1839, L'Institut (sect. 1) 7(280): 152])
- Astacopsis (masculine) Huxley, [1879], Proc. zool. Lond. 1878: 760, 764 (type species, by monotypy: Astacus franklinii Gray (J.E.), 1845, in Eyre J. Exped. Discov. centr. Australia 1:409)
- Cambarellus (masculine) Ortmann, 1905, Proc. Amer. phil. Soc. 44:
  97, 106 (type species, by original designation: Cambarus montezumae De Saussure, 1857, Rev. Mag. Zool. (2) 9:102)

- Cambarus (masculine) Erichson, 1846, Arch. Naturgesch. 12(1): 88, 89, 95 (type species, by selection by Faxon, 1898 (Proc. U.S. Nat. Mus. 20: 644): Astacus bartonii Fabricius, 1798, Suppl. Ent. syst.: 407)
- Cherax (masculine) Erichson, 1846, Arch. Naturgesch. 12(1): 88, 89 (type species by monotypy: Astacus (Cheraps) preissii Erichson, 1846, Arch. Naturgesch. 12(1): 101 [Note (not for inclusion in the Official List): This name is a junior subjective synonym of Astacus bicarinatus Gray (J.E.), 1845, in Eyre J. Exped. Discov. centr. Australia 1: 410])
- Engacus (masculine) Erichson, 1846, Arch. Naturgesch. 12(1): 88, 89, 102 (type species, by selection by Clark (1936, Mem. Nat. Mus. Victoria 10: 37): Astacus (Engaeus) fossor Erichson, 1846, Arch. Naturgesch. 12(1): 102)
- Enoplometopus (masculine) A. Milne Edwards, 1862, Ann. Sci. nat., Paris (Zool.) (4) 17 : 362 (type species, by monotypy: Enoplometopus pictus Milne Edwards (A.), 1862, Ann. Sci. nat., Paris (Zool.) (4) 17 : 362)
- Ibacus (masculine) Leach, 1815, Zool. Miscell. 2:151 (type species, by monotypy: Ibacus peronii Leach, 1815, Zool. Miscell. 2:152)
- Linuparus (masculine) White, 1847, List Crust. Brit. Mus.: 70 (type species, by monotypy: Palinurus trigonus von Siebold, 1824, Hist. nat. Japon.: 15)
- Nephropsis (masculine) Wood-Mason, 1872, Proc. asiat. Soc. Bengal 1872:151 (type species, by monotypy: Nephropsis stewarti Wood-Mason, 1872, Proc. asiat. Soc. Bengal 1872:151)
- Orconectes (masculine) Cope, 1872, Amer. Nat. 6: 409, 410, 416, 417, 419 (type species, by selection by Fowler (1912, Ann. Rep. New Jersey State Mus. 1911: 339): Orconectes inermis Cope, 1872, Amer. Nat. 6: 409, 410, 419 [Note (not for inclusion in the Official List): This name is a junior subjective synonym of Astacus pellucidus Tellkampf, 1844, Arch. Anat. Phys. wiss. Medic. 1844: 383])
- Palinurellus (masculine) von Martens, 1878, S. B. Ges. naturf. Freunde Berlin 1878: 131 (type species, by monotypy: Palinurellus gundlachi von Martens, 1878, S. B. Ges. naturf. Freunde Berlin 1878: 131)
- Palinurus Weber, 1795, Nomencl. ent. Syst. Fabr. : 94 (type species, by monotypy : Astacus elephas Fabricius, 1787, Mant. Ins. 1 : 331)

- Palinustus (masculine) Milne Edwards (A.), 1880, Bull. Mus. comp. Zool. 8:66 (type species, by monotypy: Palinustus truncatus Milne Edwards (A.), 1880, Bull. Mus. comp. Zool. 8:66)
- Paracambarus (masculine) Ortmann, 1906, Proc. Wash. Acad. Sci. 8: 1 (type species, by monotypy: Cambarus (Paracambarus) paradoxus Ortmann, 1906, Proc. Wash. Acad. Sci. 8:1, 3)
- Paranephrops (masculine) White, 1842, Gray's Zool. Miscell. (5): 78 (type species, by monotypy: Paranephrops planifrons White, 1842, Gray's Zool. Miscell. (5): 79)
- Parastacus (masculine) Huxley, [1879], *Proc. zool. Soc. Lond.* **1878 :** 759, 771 (type species, by selection by Faxon (1898, *Proc. U.S. nat. Mus.* **20 :** 683) : Astacus pilimanus von Martens, 1869, *Arch. Naturgesch.* **35**(1) : 15)
- Parribacus (masculine) Dana, 1852, Proc. Acad. nat. Sci. Philad. 6: 14 (type species, by selection in paragraph 7 of the present application : Scyllarus antarcticus Lund, 1793, Skr. naturhist. Selsk. Kbh. 2(2): 22, as defined by the lectotype selected in paragraph 7 above)
- Polycheles (masculine) Heller, 1862, S.B. Akad. Wiss. Wien 45(1): 389 (type species, by monotypy: Polycheles typhlops Heller, 1862, S.B. Akad. Wiss. Wien 45(1): 392)
- Procambarus (masculine) Ortmann, 1905, Ann. Carnegie Mus. 3(3): 435, 437 (type species, by selection by Fowler (1912, Ann. Rep. New Jersey State Mus. 1911: 340): Cambarus digueti Bouvier, 1897, Bull. Mus. Hist. nat., Paris 3: 227)
- Puerulus (masculine) Ortmann, 1897, Amer. J. Sci. (4) 4: 290 (substitute name for Puer Ortmann, 1891, Zool. Jb. Syst. 6: 15, 37, a junior homonym of Puer Lefebvre, 1842, Mag. Zool. (2)
  4: expl. pl. 92) (type species, by selection by Calman (1909, Ann. Mag. nat. Hist. (8) 3: 442): Panulirus angulatus Bate, 1888, Rep. Voy. Challenger (Zool.) 24: 81)
- Scyllarus (masculine) Fabricius, 1775, Syst. Ent.: 413 (type species, by monotypy: Cancer arctus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 633, as defined by the lectotype selected in paragraph 8 of the present application)
- Thaumastocheles (masculine) Wood-Mason, 1874, Proc. asiat. Soc. Bengal 1874: 181 (type species, by monotypy: Astacus zaleucus Thomson, 1873, Nature, Lond. 8: 246, 247)

Thenus (masculine) Leach, 1815, Trans. linn. Soc. Lond. 11: 335, 338 (type species, by monotypy: Thenus indicus Leach, 1815, Trans. linn. Soc. Lond. 11: 338 [Note (not for inclusion in the Official List): This name is a junior subjective synonym of Scyllarus orientalis Lund, 1793, Skr. naturhist. Selsk. Kbh. 2(2): 22])

Willemoesia (feminine) Grote, 1873, Nature, Lond. 8: 485 (substitute name for Deidamia von Willemoes-Suhm in Thomson, 1873, Nature, Lond. 8: 51, a junior homonym of Deidamia Clemens, 1859, J. Acad. nat. Sci. Philad. (2) 4: 137) (type species, by monotypy: Deidamia leptodactyla von Willemoes-Suhm in Thomson, 1873, Nature, Lond. 8: 51).

10. It is recommended that the specific names of the type species of the genera specified in paragraph 9 above should be placed on the *Official List of Specific Names in Zoology*, in as far as these names are available names and at the same time are the oldest such names for the species concerned. The following list gives in the first column the specific names which fulfil the conditions mentioned above. In the second column is given the original combination in which these names were used. In column (3) is given the name of the genus of which the species cited in column (1) is the type species.

Specific Name	Original Combination in which the name cited in Col. (1) was published	Genus of which the species cited in Col. (1) is the type species
(1)	(2)	(3)
angulatus Bate, 1888	Panulirus angulatus	Puerulus Ortmann, 1897
antarcticus Lund, 1793*	Scyllarus antarcticus	<i>Parribacus</i> Dana, 1852
arctus Linnaeus, 1758†	Cancer arctus	Scyllarus Fabricius, 1775
bartonii Fabricius, 1798	Astacus bartonii	Cambarus Erichson, 1846
digueti Bouvier, 1897	Cambarus digueti	Procambarus Ortmann, 1905
elephas Fabricius, 1787	Astacus elephas	Palinurus Weber, 1795

\* As defined by the lectotype selected in paragraph 7 of the present application.

† As defined by the lectotype selected in paragraph 8 of the present application.

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Specific Name

#### (1)

fossor Erichson, 1846

franklinii Gray, 1845

gundlachi von Martens, 1878

*leptodactyla* von Willemoes-Suhm, 1873

montezumae de Saussure, 1857

paradoxus Ortmann. 1906

peronii Leach, 1815

pictus Milne Edwards (A.), 1862

pilimanus von Martens, 1869

planifrons White, 1842

stewarti Wood-Mason, 1872

trigonus von Siebold, 1824

truncatus Milne Edwards (A.), 1880

typhlops Heller, 1862

zaleucus Thomson, 1873

(2)

Astacus (Engaeus) fossor Engaeus Erichson,

**Original Combination in** 

which the name cited in

Col. (1) was published

Astacus franklinii

Palinurellus gundlachi

Deidamia leptodactyla

Cambarus montezumae

Cambarus (Paracambarus) paradoxus

Ibacus peronii

Enoplometopus pictus

Astacus pilimanus

Paranephrops planifrons

Nephropsis stewarti

Palinurus trigonus

Palinustus truncatus

Polycheles typhlops

Astacus zaleucus

Genus of which the species cited in Col. (1) is the type species

(3)

1846

Astacopsis Huxley, [1879]

Palinurellus von Martens, 1878

Willemoesia Grote, 1873

*Cambarellus* Ortmann, 1905

**Paracambarus** Ortmann, 1906

Ibacus Leach, 1815

Enoplometopus Milne Edwards (A.), 1862

ParastacusHuxley, [1879]

**Paranephrops** White, 1842

Nephropsis Wood-Mason, 1872

Linuparus White, 1847

Palinustus Milne Edwards (A.), 1880

Polycheles Heller, 1862

Thaumastocheles Wood-Mason, 1874.

#### **OPINIONS AND DECLARATIONS**

11. In the case of four of the genera enumerated in paragraph 9 of the present application, the name of the nominal species, which is the type species of the genus concerned is not accepted by specialists as the oldest available name for the taxonomic species represented by the nominal species in question. These cases are :—

Name of the genus	Name of the nominal species which is the type species of the genus specified in the the first column	Oldest available name for the species specified in the second column	
(1)	(2)	(3)	
Astacoides Guérin- Méneville, 1839	Astacoides goudotii Guérin-Méneville, 1839	Astacus madagascarensis Milne Edwards (H.) & Audouin, 1839	
Cherax Erichson, 1846	Astacus (Cheraps) preissii Erichson, 1846	<i>Astacusbicarinatus</i> Gray, 1845	
Orconectes Cope, 1872	Orconectes inermis Cope, 1872	Astacus pellucidus Tellkampf, 1844	
Thenus Leach, 1815	Thenus indicus Leach,	Scyllarus orientalis	

12. The concrete proposals which I now submit for consideration are that the Commission should :—

1815

(1) use its Plenary Powers :---

(a) to validate the spelling *Cherax* as the Valid Original Spelling for the generic name published with the spellings *Cherax* and *Cheraps* by Erichson in 1846;

Lund, 1793.

- (b) to validate the emendation *Palinurus* of the generic name originally published as *Pallinurus* by Weber in 1795;
- (c) to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the specific name goudotii Guérin-Méneville, 1839, as published in the combination Astacoides goudotii;
- (2) place on the Official List of Generic Names in Zoology the twentyfive generic names enumerated in paragraph 9 of the present application with the particulars there specified ;

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- (3) place on the Official List of Specific Names in Zoology :---
  - (a) the twenty-one specific names specified in Column (1) in paragraph 10 of the present application ;
  - (b) the specific names of the four nominal species listed in Column (3) in paragraph 11 of the present application;
- (4) place the under-mentioned generic names on the Official Index of Rejected and Invalid Generic Names in Zoology :---
  - (a) Arctus De Haan, 1849 in von Siebold, Fauna japon., Crust.
     (6, 7): xx, 238 (type species, by tautonymy: Cancer arctus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:633) (a junior objective synonym of Scyllarus Fabricius, 1775);
  - (b) Arctus Dana, 1852, Proc. Acad. nat. Sci. Philad. 6:14, 19 (type species, by tautonymy : Cancer arctus Linnaeus, 1758, Syst. Nat. (ed. 10) 1:633) (a junior homonym, and a junior objective synonym, of Arctus De Haan, 1849, and a junior objective synonym of Scyllarus Fabricius, 1775);
  - (c) Avus Ortmann, 1891, Zool. Jb. Syst. 6: 15, 21 (type species, by monotypy : Palinurus trigonus von Siebold, 1824, Hist. nat. Japon. : 15) (a junior objective synonym of Linuparus White, 1847);
  - (d) Bartonius Ortmann, 1905, Proc. Amer. phil. Soc. 44: 97, 117
     (type species, by original designation : Astacus bartonii Fabricius, 1798, Suppl. Ent. syst. : 407) (a junior objective synonym of Cambarus Erichson, 1846);
  - (e) Chaeraps Huxley, [1879], Proc. zool. Soc. Lond. 1878: 752, 755, 764, 767—771, 775, 776, 786 (an Erroneous Subsequent Spelling of Cherax Erichson, 1846);
  - (f) Cheraps Erichson, 1846, Arch. Naturgesch. 12(1): 101 (an Invalid Original Spelling of Cherax Erichson, 1846);
  - (g) Deidamia von Willemoes-Suhm in Thomson, 1873, Nature, Lond. 8:51 (a junior homonym of Deidamia Clemens, 1859);
  - (h) Palinurus Fabricius, 1798, Suppl. Ent. syst.: 376, 400 (type species, by selection by Latreille (1810, Consid. gén. Ordre nat. Crust. Arachn. Ins.: 422): Palinurus quadricornis Fabricius, 1798, Suppl. Ent. syst.: 401,

which is a junior objective synonym of *Astacus elephas* Fabricius, 1787, *Mant. Ins.* **1**:331) (a junior objective synonym and junior homonym of *Palinurus* Weber, 1795);

- (i) Palinurus De Kay, 1842, Zool. New York 4:118 (type species, by monotypy: Coryphaena perciformis Mitchill, 1818, Amer. mon. Mag. 2(4):244) (a junior homonym of Palinurus Weber, 1795);
- (j) Pallinurus Weber, 1795, Nomencl. ent. Syst. Fabr. : 94 (an Invalid Original Spelling of Palinurus Weber, 1795) ;
- (k) Polycheles Brady & Robertson, 1870, Ann. Mag. nat. Hist.
  (4) 6:25 (type species, by monotypy: Polycheles stevensoni Brady & Robertson, 1870, Ann. Mag. nat. Hist. (4) 6:25) (a junior homonym of Polycheles Heller, 1862);
- Puer Ortmann, 1891, Zool. Jb. Syst. 6:15, 37 (a junior homonym of Puer Lefebvre, 1842, Mag. Zool. (2) 4: expl. pl. 92);
- (5) place on the Official Index of Rejected and Invalid Specific Names in Zoology the under-mentioned names :—
  - (a) goudotii Guérin-Méneville, 1839, as published in the combination Astacoides goudotii and suppressed under the Plenary Powers under (1)(c) above;
  - (b) *incisus* (Péron MS.) Leach, 1815, *Zool. Misc.* **2**:151, as published in the combination *Scyllarus incisus* (a junior objective synonym of *peronii* Leach, 1815, as published in the combination *Ibacus peronii*);
  - (c) madagascariensis Audouin & Milne Edwards (H.), 1841, Arch. Mus. Hist. nat., Paris 2:35, as published in the combination Astacus madagascariensis (an Erroneous Subsequent Spelling of madagascarensis Milne Edwards (H.) & Audouin, 1839, as published in the combination Astacus madagascarensis);
  - (d) quadricornis Weber, 1795, Nomencl. ent. Syst. Fabr.: 94, as published in the combination Pallinurus quadricornis (a junior objective synonym of elephas Fabricius, 1787, as published in the combination Astacus elephas);
  - (e) quadricornis Fabricius, 1798, Suppl. Ent. syst.: 401, as published in the combination Palinurus quadricornis (a junior objective synonym of elephas Fabricius, 1787, as published in the combination Astacus elephas, and a junior homonym, and a junior objective synonym of

*quadricornis* Weber, 1795, as published in the combination *Pallinurus quadricornis*);

- (f) ursus Dana, 1852, Proc. Acad. nat. Sci. Philad. 6:14, as published in the combination Arctus ursus (a junior objective synonym of arctus Linnaeus, 1758 as published in the combination Cancer arctus);
- (g) ursusmajor Herbst, 1793, Versuch Naturgesch. Krabben Krebse 2(3): 82, as published in the combination Cancer (Astacus) ursus-major and as defined by the lectotype selected in paragraph 7 of the present application (a junior objective synonym of antarcticus Lund, 1793, as published in the combination Scyllarus antarcticus);
- (h) ursusminor Herbst, 1793, Versuch Naturgesch. Krabben Krebse 2(3): 83, as published in the combination Cancer (Astacus) ursus-minor and as defined by the lectotype selected in paragraph 8 of the present application (a junior objective synonym of arctus Linnaeus, 1758, as published in the combination Cancer arctus);
- (i) vulgaris Latreille, [1802—1803], Hist. nat. gén. part. Crust. Ins. 6: 191, as published in the combination Palinurus vulgaris (a junior objective synonym of homarus Linnaeus, 1758, Syst. Nat. (ed. 10) 1: 633, as published in the combination Cancer homarus);
- (j) vulgaris Latreille, 1804, Ann. Mus. Hist. nat., Paris 3: 391, as published in the combination Palinurus vulgaris (a junior objective synonym of elephas Fabricius, 1787, as published in the combination Astacus elephas, and a junior homonym of vulgaris Latreille, [1802—1803], as published in the combination Palinurus vulgaris);
- (6) place on the Official List of Family-Group Names in Zoology the under-mentioned names :—
  - (a) CAMBARINAE Hobbs, 1942, Univ. Florida Publ. (Biol. Ser.)
     3(2): 23 (type genus: Cambarus Erichson, 1846);
  - (b) PALINURIDAE (correction by Samouelle (1819, Entomologists' useful Compendium : 92) of PALINURINI (published as the name for a family)) Latreille, [1802—1803], Hist. nat. gén. partic. Crust. Ins. 3:31: (type genus : Palinurus Weber, 1795);
  - (c) PARASTACIDAE Huxley, [1879], Proc. zool. Soc. Lond. 1878 : 771, 775 (type genus : Parastacus Huxley, [1879]);

- (d) POLYCHELIDAE Wood-Mason, 1874, Proc. asiat. Soc. Bengal 1874 : 180 (type genus : Polycheles Heller, 1862);
- (e) SCYLLARIDAE (correction by White (1847, *List Crust. Brit. Mus.*: 67) of SCYLLARIDES) Latreille, 1825, *Fam. nat. Regn. anim.*: 278 (type genus : *Scyllarus* Fabricius, 1775).
- (7) place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the under-mentioned names :---
  - (a) PALINURINI Latreille, [1802—1803] (an Invalid Original Spelling for PALINURIDAE) (cf. (6)(b) above);
  - (b) SCYLLARIDES Latreille, 1825 (an Invalid Original Spelling for SCYLLARIDAE) (cf. (6)(e) above).

#### II. THE SUBSEQUENT HISTORY OF THE CASE

2. Registration of the present application : Upon the receipt of Dr. Holthuis's application the question of the addition to the *Official List of Generic Names in Zoology* of the names of twenty-five genera of Macrura Reptantia (Class Crustacea) and matters incidental thereto was allotted the Registered Number Z.N.(S.) 1039.

3. Publication of the present application : The present application was sent to the printer on 23rd April 1956 and was published on 20th July of that year in Part 4 of Volume 12 of the *Bulletin* of Zoological Nomenclature (Holthuis, 1956, Bull. zool. Nomencl. 12 : 107-119).

**4.** Issue of Public Notices : Under the revised procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 51—56), Public Notice of the possible use by the International Commission on Zoological Nomenclature of its Plenary Powers in the present case was given on 20th July 1956 (a) in Part 4 of Volume 12 of the *Bulletin of Zoological Nomenclature* (the Part in which Dr. Holthuis's application was published) and (b) to the other prescribed serial

publications. In addition, such Notice was given also to four general zoological serial publications.

5. No Objection Received : No objection to the action proposed in the present case was received from any source.

# III. THE DECISION TAKEN BY THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

6. Issue of Voting Paper V.P.(57)12 : On 15th February 1957 a Voting Paper (V.P.(57)12) was issued in which the Members of the Commission were invited to vote either for, or against, "the proposal relating to the proposed addition to the *Official List* of the names of twenty-five genera of Macrura Reptantia (Class Crustacea) as set out in Points (1) to (7) in paragraph 12 on pages 116—119 in Volume 12 of the *Bulletin of Zoological Nomenclature*" [i.e. in the paragraph numbered as above in the paper reproduced in the first paragraph of the present *Opinion*].

7. The Prescribed Voting Period : As the foregoing Voting Paper was issued under the Three-Month Rule, the Prescribed Voting Period closed on 15th May 1957.

8. Particulars of the Voting on Voting Paper V.P.(57)12 : At the close of the Prescribed Voting Period, the state of the voting on Voting Paper V.P.(57)12 was as follows :---

(a) Affirmative Votes had been given by the following twentyfour (24) Commissioners (arranged in the order in which Votes were received):

Boschma; Mayr; Lemche; Hering; Jaczewski; Prantl; Holthuis; Bonnet; Mertens; Dymond; Vokes; Bodenheimer; Bradley (J.C.); Key; Riley; Stoll; Esaki; do Amaral; Hemming; Kühnelt; Sylvester-Bradley; Cabrera; Tortonese; Miller; (b) Negative Votes :

None;

(c) Prevented from voting by interruption of postal communications consequent upon political disturbances, one (1) :

Hankó;

(d) Voting Papers not returned :

None.

**9.** Declaration of Result of Vote : On 16th May 1957, Mr. Hemming, Secretary to the International Commission, acting as Returning Officer for the Vote taken on Voting Paper V.P.(57)12, signed a Certificate that the Votes cast were as set out in paragraph 8 above and declaring that the proposal submitted in the foregoing Voting Paper had been duly adopted and that the decision so taken was the decision of the International Commission in the matter aforesaid.

10. Withdrawal from the scope of the decision taken on Voting Paper V.P.(57)12 of the proposals submitted therewith in regard to two generic names having the termination "-opsis": On 17th February 1958 the Secretary executed the following Minute in which he withdrew from the scope of the decision taken on Voting Paper V.P.(57)12 the proposals submitted therewith in relation to two generic names having the termination "-opsis", having regard to the fact that since the submission of the foregoing Voting Paper the Commission had adopted a *Declaration (Declaration* 36) in which it had confirmed the attribution of the feminine gender to names having the above termination and not

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the masculine gender which in that application it had been recommended should be attributed to the generic names in question :---

#### Withdrawal from the scope of the decision taken on Voting Paper V.P.(57)12 of the proposals submitted in relation to the names "Astacopsis" Huxley, [1879], and "Nephropsis" Wood-Mason, 1872

#### By FRANCIS HEMMING, C.M.G., C.B.E.

#### (Secretary to the International Commission on Zoological Nomenclature)

Among the names recommended in Application Z.N.(S.) 1039 for addition to the *Official List of Generic Names in Zoology* were two names having the termination "-opsis", to which it was recommended that the masculine gender be attributed, that being the gender currently assigned to those names. The names in question were *Astacopsis* Huxley, [1879], and *Nephropsis* Wood-Mason, 1872. At the time when this case was submitted to the Commission for decision it was recognised that the attribution of the foregoing gender to these names was not in harmony with the gender rules provisionally adopted by the Copenhagen Congress in 1953, but the review of those rules as prescribed by that Congress was already in hand and it was accordingly decided that the best course would be to include the proposals in regard to the above names in the recommendation to be submitted for vote, subject to the question at issue being reviewed before the time came for the preparation of an *Opinion* embodying the decision taken by the Commission on the present application.

2. In the interval which has since elapsed the Commission has completed its review of the relevant portion of the Copenhagen gender rules and has agreed to uphold as being correct the rule that generic names having the termination "-opsis" are to be treated as being feminine in gender. The decision so taken has since been embodied in *Declaration* 36 (1958, *Ops. Decls. int. Comm. zool. Nomencl.* 18: i—xii).

3. A new situation has been created by the adoption of the foregoing *Declaration*, for it now becomes evident that, if the masculine gender is to be attributed to the two generic names cited above, it will be necessary for the Commission to use its Plenary Powers for that purpose. Accordingly, the vote provisionally taken on this subject on Voting Paper V.P.(57)12 becomes non-effective, as that vote was not taken under the Plenary Powers Procedure. 4. Now therefore as Secretary I hereby direct that the proposals relating to the under-mentioned names included in the application submitted with Voting Paper V.P.(57)12 be withdrawn from the scope of the decision taken thereon and therefore that no reference to the names in question be included in the Ruling to be given in the *Opinion* to be prepared for the purpose of embodying the decision taken on the said Voting Paper :---

- (1) the under-mentioned generic names having the termination "-opsis":--
  - (a) Astacopsis Huxley, [1879];
  - (b) Nephropsis Wood-Mason, 1872;
- (2) the under-mentioned specific names which are respectively the specific names of the type species of the genera specified in (1) above :---
  - (a) *franklinii* Gray (J.E.), 1845, as published in the combination *Astacus franklinii*;
  - (b) stewarti Wood-Mason, 1872, as published in the combination Nephropsis stewarti.

11. Confirmation of the attribution of the masculine gender to the generic name "Paranephrops" White, 1842: On 17th February 1958 the Secretary executed the following Minute drawing attention to certain action taken by the International Commission subsequent to its provisional decision in Voting Paper V.P.(57)12 that the gender to be attributed to the generic name *Paranephrops* White, 1842, be the masculine gender by which the said decision was reinforced and confirmed, and directing that in the Ruling to be prepared for giving effect to the vote taken on the above Voting Paper the foregoing be the gender to be attributed to the said generic name :—

#### Confirmation of the gender provisionally attributed to the generic name "Paranephrops" White, 1842, by the International Commission by its vote on Voting Paper V.P.(57)12

#### By FRANCIS HEMMING, C.M.G., C.B.E.

(Secretary to the International Commission on Zoological Nomenclature)

The names recommended in Application Z.N.(S.) 1039 for addition to the *Official List of Generic Names in Zoology* included the name Paranephrops White, 1842, to which it was proposed that the gender to be attributed should be the masculine gender. At the time of the submission of the above application to the Commission for decision on Voting Paper V.P.(57)12 the question of the gender to be attributed to names having the termination "-ops", like that to names having the termination "-opsis" which formed the subject of a Minute executed by myself as Secretary earlier today, was sub judice. For reasons similar to those set forth in the Minute referred to above, it was decided to include the proposal relating to the gender to be attributed to the name Paranephrops White among the proposals to be submitted to the Commission with the foregoing Voting Paper, subject, as in the parallel case of the two names having the termination "-opsis", to the question at issue being reviewed before the time came for the preparation of the Opinion embodying the decision taken by the Commission on the present application.

2. Since the submission to the Commission of the above Voting Paper the question of the gender to be attributed to generic names having the termination "-ops" has been the subject of a decision which has since been embodied in Declaration 36 (1958, Ops. Decls. int. Comm. zool. Nomencl. 18 : i-xii). Under this Declaration it was ruled that the gender normally attributable to names having the termination "-ops" is the feminine gender but that in certain specified cases the gender to be attributed to such names is the masculine gender. In the light of the decision embodied in the foregoing Declaration the Commission reviewed the question of the gender to be attributed to the generic name Nephrops [Leach], [1814], a name placed on the Official List many years ago for which no gender had hitherto been assigned on that *List*. The decision taken by the Commission on the above subject (by its vote on Voting Paper V.P.(57)63) was that under the terms of Declaration 36 the gender attributable to the generic name Nephrops [Leach] is the masculine gender. The decision so taken has since been embodied in Direction 101 (now in the press).<sup>1</sup>

3. The foregoing decision by the Commission as to the gender to be attributed to the generic name *Nephrops* Leach carries with it automatically a like decision as to the gender of any compound name of which the word "*Nephrops*" forms the terminal portion. Accordingly, under the Ruling given in *Direction* 101 the gender attributable to the generic name *Paranephrops* White is the masculine gender.

4. Now therefore as Secretary I hereby direct and confirm that the vote taken provisionally by the Commission on Voting Paper

<sup>&</sup>lt;sup>1</sup> The Direction here referred to has since been published as Part F.12 of Section F of Volume 1 of the Opinions and Declarations Series (1958, Ops. Decls. int. Comm. zool. Nomencl. 1(F): 191-200.

V.P.(57)12 that the gender to be attributed to the generic name *Paranephrops* White, 1842, shall be the masculine gender is in full accord with the provisions of *Declaration* 36, a *Declaration* adopted by a later vote of the Commission, and with the application of those provisions to the case of the name *Nephrops* [Leach], of which the name *Paranephrops* White is compounded, by the Ruling later given by the Commission in *Direction* 101. I accordingly direct that the said masculine gender be attributed to the generic name *Paranephrops* White when by the Ruling to be given in the *Opinion* embodying the decision taken by the Commission by its vote on Voting Paper V.P.(57)12 that name is placed upon the *Official List of Generic Names in Zoology*.

12. Preparation of the Ruling given in the present "Opinion": On 18th February 1958 Mr. Hemming prepared the Ruling given in the present *Opinion* and at the same time signed a Certificate that the terms of that Ruling were in complete accord with those of the proposal approved by the International Commission in its Vote on Voting Paper V.P.(57)12.

**13.** Original References for Generic and Specific Names : The original references for the generic and specific names placed on *Official Lists* and *Official Indexes* by the Ruling given in the present *Opinion* are as set out in the under-mentioned paragraphs of the paper reproduced in the first paragraph of this *Opinion* :—

- (a) The references for the twenty-three generic names placed on the *Official List* are as set out in the list given in paragraph 9.
- (b) The references for the nineteen specific names placed on the *Official List* are as set out in paragraph 9 under the names of the genera of which the species concerned are severally the type species, as specified in Column (3) in paragraph 10.
  - (c) The references for the four specific names placed on the *Official List* which are not the specific names of the type species of genera are as set out in paragraph 9 under the names of the genera specified in Column (1) in paragraph 11.

- (d) The references for the twelve generic names placed on the *Official Index* are set out in paragraph 12(4).
- (e) The references for the ten specific names placed on the Official Index are given as specified below :---
  - (i) for the specific name goudotii Guérin-Méneville, 1839, as published in the combination Astacoides goudotii : as set out under the generic name Astacoides Guérin-Méneville, 1839, in paragraph 9;
  - (ii) for the remaining nine specific names concerned : as set out in paragraph 12(5).

14. References for the selections of type species for nominal genera: The following are the references for the selections of type species for nominal genera specified in the Ruling given in the present *Opinion* :—

For <i>Cambaru</i> s Erichson, 1846	Faxon, 1898, Proc. U.S. nat. Mus. <b>20</b> : 644
For <i>Engaeus</i> Erichson,	Clark, 1936, Mem. Nat. Mus.
1846	Victoria 10:37
For Orconectes Cope,	Fowler, 1912, Ann. Rep. New Jersey
1872	State Mus. 1911 : 339
For <i>Parastacus</i> Huxley, [1879]	Faxon, 1898, Proc. U.S. nat. Mus. 20:683
For <i>Parribacus</i> Dana, 1852	Holthuis, 1956, <i>Bull. zool. Nomencl.</i> 12:110 (paragraph 7), 114 (para- graph 9)
For <i>Procambarus</i>	Fowler, 1912, Ann. Rep. New Jersey
Ortmann, 1905	State Mus. 1911: 340
For <i>Puerulus</i> Ortmann,	Calman, 1909, Ann. Mag. nat. Hist.
1897	(8) <b>3 :</b> 442

15. References for the selections of lectotypes for nominal species : The following are the references for selections of lectotypes for nominal species specified in the Ruling given in the present *Opinion* :—

For	Scyllarus	antarcticus	
	Lund.	1793	

Holthuis, 1956, *Bull. zool. Nomencl.* 12:111, paragraph 7

- For Cancer arctus Linnaeus, 1758
- For Cancer (Astacus) ursusmajor Herbst, 1793
- Holthuis, 1956, Bull. zool. Nomencl. 12:111, paragraph 8
- Holthuis, 1956, *Bull. zool. Nomencl.* 12:111, paragraph 7
- For Cancer (Astacus) ursusminor Herbst, 1793
- Holthuis, 1956, Bull. zool. Nomencl. 12:112, paragraph 8

16. Original References for Family-Group Names : The original references for the family-group names placed by the Ruling given in the present *Opinion* on the *Official List* or, as the case may be, on the *Official Index* for names of taxa belonging to the family-group category are as set out in paragraph 12 (6) of the paper reproduced in the first paragraph of this *Opinion*.

17. Compliance with Prescribed Procedures : The prescribed procedures were duly complied with by the International Commission on Zoological Nomenclature in dealing with the present case, and the present *Opinion* is accordingly hereby rendered in the name of the said International Commission by the undersigned Francis Hemming, Secretary to the International Commission on Zoological Nomenclature, in virtue of all and every the powers conferred upon him in that behalf.

18. "Opinion " Number : The present *Opinion* shall be known as *Opinion* Five Hundred and Nineteen (519) of the International Commission on Zoological Nomenclature.

DONE in London, this Eighteenth day of February, Nineteen Hundred and Fifty-Eight.

Secretary to the International Commission on Zoological Nomenclature

### FRANCIS HEMMING